THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 24

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Ex parte THIERRY DUPIN, JEAN LAVINA and REGIS POISSON

Appeal No. 1996-0167 Application 08/082,107¹

HEARD: September 14, 1999

Before KIMLIN, OWENS and SPIEGEL, Administrative Patent Judges.

KIMLIN, Administrative Patent Judge.

DECISION ON APPEAL

This is an appeal from the final rejection of claims 33-45, all of the claims remaining

¹ Application for patent filed June 28, 1993. According to appellants, this application is a divisional of application serial no. 07/863,140, now U.S. Patent No. 5,244,648, issued September 14, 1993; which is a continuation of application serial no. 07/737,902, filed July 26, 1991, now abandoned, which is a continuation of application serial no. 07/169,121, filed March 9, 1988, now abandoned, which is a continuation of application serial no. 06/876,826, filed June 20, 1986, now abandoned, which is a continuation of application serial no. 06/508,575, filed June 28, 1983, now abandoned, which is a continuation-in-part of application serial no. 06/330,000, filed December 11, 1981, now abandoned.

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in the present application. Claim 33 is illustrative:

- 33. A process for the preparation of alumina agglomerates comprising
 - (I) preparing a ground or unground powder of active alumina having a poorly crystalline structure, an amorphous structure or an admixture of said structures;
 - (ii) agglomerating said active alumina powder to form alumina agglomerates;
 - (iii) combining at least one acid capable of dissolving a portion of said alumina agglomerates with a different compound from said acid capable of providing an anion which will combine with aluminum ions in solution to form an aqueous treatment medium having less than 50% by weight of said compound providing an anion, and subjecting said agglomerates to an aqueous medium treatment by contacting said agglomerates with said aqueous treatment medium;
 - (iv) subjecting the combined agglomerates and the aqueous treatment medium to a hydrothermal treatment by heating wherein the combination of said aqueous medium treatment and hydrothermal treatment increases the porosity of the agglomerates by expansion; and then
 - (v) thermally activating the agglomerates with essentially no loss of alumina agglomerates treated as a result of the combination of steps (iii)-(v).

The examiner relies upon the following reference as evidence of obviousness:

Schmerling 2,651,617 Sep. 08, 1953

Appellants' claimed invention is directed to a process for preparing alumina agglomerates. The process involves, *inter alia*, treating the alumina agglomerates with

an aqueous medium comprising an acid, such as nitric acid, that is capable of

dissolving a portion of the agglomerates, and a different compound, such as acetic acid, that is capable of providing an anion which combines with aluminum ions in solution. The aqueous treatment medium comprises less than 50 percent by weight of the compound providing the anion. According to appellants, the claimed treatment increases the porosity of the agglomerates without any essential loss of alumina.

Appealed claims 33-45 stand rejected under 35 U.S.C. § 103 as being unpatentable over Schmerling.

Upon careful consideration of the opposing arguments presented on appeal, we find that the examiner has failed to establish a prima facie case of obviousness for the claimed subject matter. Accordingly, we will not sustain the examiner's rejection.

Although Schmerling discloses treating alumina agglomerates with an aqueous medium comprising a mineral acid and an organic acid, such as acetic acid, we agree with appellants that Schmerling fails to teach or suggest utilizing a treating solution wherein the compound (acetic acid) that combines with aluminum ions is present in an amount of less than 50 per cent by weight, as required by the appealed claims. Schmerling expressly teaches treating the alumina agglomerates "with an aqueous organic acid containing at least 60% by weight of acid." (column 2, lines 25 and 26). Also, Schmerling discloses a treatment mixture "containing a major proportion of acetic

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acid and a minor proportion of hydrochloric acid" (column 2, lines 39-41), and

claim 1 of Schmerling recites "an acidic reagent containing a major proportion of an organic acid." According to the examiner, Schmerling's major proportion of organic acid "would overlap the instantly claimed less than 50 percent." (page 4 of answer). However, while it can be argued that a major proportion of an organic acid can be literally interpreted as some amount less than 50 percent, we find that this is an unreasonable interpretation when the entirety of the Schmerling disclosure is considered as a whole. In our view, when claim 1 of Schmerling is read in light of the specification, which clearly teaches and exemplifies an aqueous treatment media containing at least 60 percent by weight of organic acid, one of ordinary skill in the art would not understand that the treatment solution may contain less than 50 percent by weight of organic acid. We note that EXAMPLE III of Schmerling, which employs "a predominant proportion of glacial acetic acid and a minor proportion of concentrated hydrochloric acid", uses "150 grams of glacial acetic acid and 5 grams of concentrated hydrochloric acid", which is considerably greater than 60 percent of acetic acid. Consequently, we disagree with the examiner that Schmerling provides a teaching of utilizing an aqueous treatment solution comprising less than 50 percent by weight of organic acid.

Since we find that the applied prior art fails to establish a *prima facie* case of obviousness, it is unnecessary to assess the probative value of the Poisson declaration.

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In conclusion, based on the foregoing, the examiner's decision rejecting the appealed claims is reversed.

REVERSED

EDWARD C. KIMLIN Administrative Patent Judge)
TERRY J. OWENS Administrative Patent Judge)) BOARD OF PATENT) APPEALS AND) INTERFERENCES)
CAROL A. SPIEGEL Administrative Patent Judge)))

vsh

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